

STANDARDS AND SPECIFICATIONS

FOR

LAKEBED

RANGE SITE DESCRIPTION

PE-26-38

Pampa

Land Resource Area High Plains, Rolling Plains

Location Canadian, Clarendon, Follett, Miami,
Pampa, Perryton, Spearman, Stinnett,
Stratford

Date January 9, 1974

1. TOPOGRAPHY AND ELEVATION: This site occurs on nearly level areas with concave surfaces in the beds of intermittent lakes. The soil surface of undisturbed areas has a gilgai microrelief.
2. SOILS:
 - a. The significant soils that characterize this site are clays that are more than 20 inches deep. These soils are somewhat poorly drained and are very slowly permeable. Water flows onto these areas from surrounding uplands and remains until it evaporates. When dry and unprotected by vegetation, the soil is highly susceptible to wind erosion. Water enters the soil rapidly when the soil is dry and cracked. Water availability to plants varies from excessive to non-available, depending on the present water regime.
 - b. Some soil taxonomic units which characterize this site are:
Randall clay
Ness clay
 - c. Specific site location in Field Office area:
3. CLIMAX VEGETATION:
 - a. The climax plant community varies considerably among playa lakes and is dependent upon size, inundation period, and available runoff. However, the climax plant community is dominated by short and mid grasses, sedges and forbs. The smaller lakes in many cases primarily support stands of western wheatgrass while others that have long periods of inundation primarily support sedges and rushes. Still other lakebed areas support 10-12 species, many of which may be annuals. Areas supporting the larger variety of vegetation are usually the larger lakebeds.

RELATIVE PERCENTAGE

<u>Grasses, Sedges</u>		75%	<u>Forbs</u>	25%
Western wheatgrass	}	60	Smartweed	10
Spike sedges			Arrowhead	5
Buffalograss		10	Slimleaf goosefoot	5
Blue grama		5	Beakpod evening primrose	5
Knotgrass		T	Bur ragweed	T
			Kochia	T
			Fleabane	T

- b. As retrogression occurs on areas with recent dry water regime, short grasses such as buffalograss and blue grama increase dramatically. Annual grasses such as little barley, barnyard grass, and 6 weeks fescue invade the site with a variety of forbs.

Changes in vegetation caused by prolonged flooding are a disappearance of buffalograss and blue grama, a severe decrease in western wheatgrass, and a dramatic increase in the percentage of sedges and rushes.

When all the water evaporates following a period of prolonged flooding, the sedges and rushes decrease rapidly and a western wheatgrass increases rapidly. Under continued dry conditions buffalograss and blue grama increase slowly.

Plant composition and production on this site is more dependent on available moisture, rainfall and runoff accumulation rather than grazing pressure.

- c. The annual yields vary widely from year to year and are dependent on available runoff water. Approximate total annual yields of this site in excellent condition ranges from 500 pounds in dry years to as much as 5,000 pounds, depending on ? inundation or ideal moisture for forage production.

INTERPRETATIVE DATA

1. WILDLIFE NATIVE TO THE SITE: This site is inhabited by quail, dove, and pheasant. When flooded, shorebirds and migratory waterfowl frequent this site. Most of the forbs on this site produce food and limited cover for these species.
2. GUIDE TO INITIAL STOCKING RATE:

<u>Condition Class</u>	<u>Climax Vegetation</u>	<u>AC/AU/YL</u>
Excellent	76-100	6-10
Good	51-75	8-20
Fair	26-50	18-35
Poor	0-25	32+

3. RELATIVE FORAGE QUALITY OF SPECIES:

a. Cattle

<u>Primary *</u>	<u>Secondary *</u>	<u>Low Value</u>
Western wheatgrass	Smartweed	Annual grasses
Blue grama	Slimleaf goosefoot	Other annual forbs
Buffalograss	Kochia	
Sedges	Beaked evening primrose	
Knotgrass	Arrowhead	

b. Quail, dove, and pheasant

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Annual forb seed	Sedge seed	Other grass seed
Bur ragweed	Barnyard grass	

c. Migratory Waterfowl

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Smartweed	Algae and other aquatic vegetation	—
Slimleaf goosefoot	Rush species	
Barnyard grass		
Arrowhead		